DOCUMENT RESUME

ED 058 085 SE 013 186

TITLE	Report of the Council on Environmental Quality. Hearing Before the Subcommittee on Air and Water Pollution of the Committee on Public Works, 91st Congress, Second Session, August 11, 1970.
INSTITUTION	Congress of the U.S., Washington, D.C. Senate Committee on Public Works.
PUB DATE	Aug 70
NOTE	30p.
AVAILABLE FROM	Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 ($0.20)
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Air Pollution Control; Committees; *Environmental Influences; *Federal Legislation; Federal Programs; Quality Control; *Question Answer Interviews; Reports; *Water Pollution Control

ABSTRACT

Presented in this bulletin is the text of the hearing before the Subcommittee on Air and Water Pollution of the Committee on Public Works, United States Senate concerning the "First Annual Environmental Quality Report" of the Council on Environmental Quality. The hearing was held August 11, 1970 for the purpose of providing open discussion of the findings and recommendations of the President's Council on Environmental Quality. These recommendations generally emphasize the urgency of immediate action to reverse present trends toward environmental destruction. Russell E. Train, chairman of the Council on Environmental Quality, responded to the subcommittee questioning led by chairman Senator Edmund S. Muskie, which dealt primarily with air, water, and solid waste pollution concerns. (BL)

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REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY

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HEARING

BEFORE THE

SUBCOMMITTEE ON AIR AND WATER POLLUTION

OF THE

COMMITTEE ON PUBLIC WORKS UNITED STATES SENATE

NINETY-FIRST CONGRESS

SECOND SESSION

FOR

THE PURPOSE OF PROVIDING OPEN DISCUSSION OF THE FINDINGS AND RECOMMENDATIONS OF THE PRESIDENT'S COUNCIL ON ENVIRONMENTAL QUALITY

AUGUST 11, 1970

Printed for the use of the Committee on Public Works

SE 013 186

U.S. GOVERNMENT PRINTING OFFICE
49-576 WASHINGTON : 1970

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402 - Price 20 cents

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REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY

TUESDAY, AUGUST 11, 1970

U.S. SENATE,
SUBCOMMITTEE ON AIR AND WATER POLLUTION
OF THE COMMITTEE ON PUBLIC WORKS,
Washington, D.C.

The subcommittee met at 10:42 a.m., pursuant to call, in room 4200, New Senate Office Building, Senator Edmund S. Muskie (chairman of the subcommittee) presiding.

Present: Senators Muskie, Spong, Boggs, and Dole.

Also present: Richard B. Royce, chief clerk and staff director; Bailey Guard, assistant chief clerk (minority); M. Barry Meyer, counsel; Thomas C. Jorling, minority counsel; Leon G. Billings, Richard D. Grundy, Adrien Waller, Richard W. Wilson, and Philip T. Cummings, professional staff members.

Senator MUSKIE. First of all, I would like to express my appreciation to Chairman Train and his colleagues for taking the time to visit with us this morning about this very important report.

I would like to read a brief statement to put this hearing in its context from our point of view.

Today's hearing is for the purpose of providing open discussion of the findings and recommendations of the President's Council on Environmental Quality as released by the President at noon yesterday.

The Council is to be commended for preparing a comprehensive summary and review of the Nation's critical environmental problems.

While the recommendations included in the report are substantially the same as those made by the President earlier this year, they reemphasize the urgency of immediate action to reverse present trnds toward environmental destruction.

The report has its limitations. As the report itself explains, time did not allow implementation of the Council's mandate "to formulate and recommend national policies to promote the improvement of the quality of the environment."

The report underlines the need to change our crisis response to environmental problems. Statutory deadlines, mandatory change, and governmental restrictions on mobility are the byproducts of poor planning in the past.

The problems we face today should have been dealt with in the fifties. But we did not. So, today, the environmental crisis is accepted as inevitable.

Pending legislation—some of which will be enacted this year—should force us to change our habits. Automobiles may be banned

from the downtown streets of major cities and mass transit systems built with massive Federal financial support.

Air and water pollution controls may restrict the location, if not the construction of new powerplants. Some industrial facilities will cease to operate.

And concern for the effects of noise on the environment may stop the planned construction of a supersonic transport.

But these are only responses to the pressures of crises. They do not compose an environmental policy.

As the report points out, the Nation lacks a national energy policy, a national transportation policy, and a national land-use policy.

But a national energy policy which does not consider environmental protection as a precondition of planning will be worse than a lack of policy.

A national transportation policy which is dictated by economic interest rather than environmental and social values will be worse than a lack of policy.

And a national land-use policy which fails to consider the existing Federal system, present and proposed environmental standards, present outmoded fiscal policies, and population and resource concentration will be worse than a lack of policy.

Today's discussion should provide an opportunity to discuss how to deal with these longer range environmental problems:

How is the Nation to balance its demand for energy with the environmental problems that energy production creates?

How will our consumption patterns be altered to reflect resource scarcity and the need for pollution control?

What kind of policy will assure planned use of land, water, and air, in urban and rural environments?

What kind of governmental structures will be developed to deal with the environmental problems of metropolitan areas?

What kind of transportation systems will be built in the next 5 to 10 years to assure mobility without strangulation?

What kind of preevaluation mechanisms will be developed to guard against potential environmental disasters like those triggered by pesticides?

None of these questions can wait until the next critical pollution episode. The Nation cannot afford crisis response to environmental problems.

Today's hearing, investigations by the Joint Committee on the Environment—which we hope will be established soon—and deliberations by the Council on Environmental Quality will focus attention on the need to evoke fundamental changes in the way we live, work, and play.

I would like to add that I think this report, understandably limited because of the pressures of time and because you have been in office only 6 months, really serves a most useful purpose in spelling out your comprehension of the dimensions of the responsibility you have been given. I think the report represents a broad vision, the kind of vision which ought to motivate the Council in its first year of endeavors. I compliment the Chairman and the members of the Council.

Senator Boggs has, I think, a brief statement.

Senator Boggs. Thank you, Mr. Chairman. May I compliment you on your statement. I wish to join you and other members of the com-

mittee in welcoming Chairman Train and his colleagues from the Council on Environmental Quality this morning.

The work they have accomplished has been very impressive during the brief 6 months since their nominations to the Council were confirmed by the Senate. I congratulate each of you. I had the opportunity to read hastily through the Council's report last evening. It seemed to me to be a very excellent summation of our environmental challenge. It brought into better perspective, I believe, many of the issues now before this subcommittee, the Congress, and the country.

Our subcommittee, of course, has the jursidiction over many of the subjects discussed in the Council's report, such as air, water, solid waste, and other related pollution problems involving the environmental challenge.

Thus, we are keenly interested in your evaluations of these problems. The Council's discussion of the broad range of environmental problems demonstrates the interrelationships of the various factors threatening the environment and it clearly charts the opportunity our Nation has to improve the quality of life during the 1970's.

When he sent this report to the Congress yesterday, President Nixon made this observation, and I would like to quote it:

> Our environmental problems are very serious, indeed urgent, but they do not justify either panic or hysteria. The problems are highly complex, and their resolution will require rational, systematic approaches, hard work, and patience.

Chairman Train and his distinguished colleagues on the Council have demonstrated their readiness to bring these qualities to the challenge of environmental enhancement. I know each of us is anxious to hear from Chairman Train today, and we appreciate his appearance here.

Thank you very much, Mr. Chairman.

Senator MUSKIE. Thank you, Senator Boggs.

Senator Spong?

Senator SPONG. Mr. Chairman, I have no opening statement. I would like to associate myself with the very fine remarks that you have made, and also like to welcome Chairman Train—I think I called him Dr. Train the other day, in the nerve gas hearings—here today.

Senator MUSKIE. We have looked forward to this day, Mr. Chairman, and members of the Council. I think I indicated, as did Senator Boggs, and other Senators, our appreciation of your appointment as Chairman of this Council. We have high hopes that by creation of the Council and by the related legislation giving you authority—but, as yet, inadequate appropriations to do your work—that we are at least on the road to development of an environmental policy for our country. We are delighted to welcome you this morning.

STATEMENT OF HON. RUSSELL E. TRAIN, CHAIRMAN, COUNCIL ON ENVIRONMENTAL QUALITY, ACCOMPANIED BY ROBERT CAHN AND GORDON J. MACDONALD, MEMBERS OF THE COUNCIL

Mr. TRAIN. Thank you, Mr. Chairman.

If I might respond to one of the chairman's introductory remarks, in which he expressed the hope that the Joint Committee on Environment might be established soon, I think that the Council would be glad to associate itself with that hope, noting that we are presently

scheduled to testify before three committees this week on the report, and I suspect this may be only a beginning. I am sure a joint committee would be very welcome by all hands here.

Senator MUSKIE. I hope we can help to prepare you this morning for your later bouts this week.

Mr. TRAIN. Mr. Chairman, and members of the committee, it is a pleasure to appear before this distinguished committee for the first time, I would say, in our role as a Council, because, of course, I have appeared before this committee on previous occasions.

For the record, I would like to note that I am accompanied by both members of the Council, Mr. Robert Cahn and Dr. Gordon MacDonald.

Our appearance today, in connection with the filing by the President of the "First Annual Environmental Quality Report," furnishes a good opportunity to review the work of the Council and those areas in the report of particular relevance for this committee.

As you know, the first annual report has been prepared during the organizing period of the Council. Only a few months have been available for the task.

Likewise, the Council has had only a small staff during this period, all of whom have carried major responsibility for the wide variety of projects and issues, other than the report, which have concerned the Council during these months.

We also recognize that we possess insufficient environmental quality indicators or systems by which to monitor the environment and outline trends with any degree of accuracy at this time.

Nevertheless, within the bounds of these limitations, the Council has attempted to bring together a comprehensive description of environmental problems and issues facing the Nation.

It does not require a highly developed monitoring system to tell that the present state of our environment is badly degraded, that our waters remain seriously polluted, that the air in and around our cities is in unsatisfactory condition, that congestion and noise and stress are increasing, that environmentally related disease is rising, that the solid wastes of our society are continuing to mount, that open space and natural areas are diminishing, that the natural diversity of our surroundings is decreasing, that ugliness and tawdriness are spreading across our American landscape.

Nevertheless, the year 1970 has marked the beginning of a significant attack on these problems. Not only has public awareness and concern reached new levels, but at the same time—

> We have begun to achieve a better understanding of the complex root causes of our problems;
>
> We have begun to build into the decisionmaking process of Federal agencies a consideration of a broad range of environmental factors;
>
> We have continued and strengthened the development of a comprehensive action program that, given persistence and support, can arrest and reverse the adverse trends in our environment; and
>
> We have begun to build the institutional base for more effective environmental management.

I would like to just give one word of emphasis to that last item, which I think is too often overlooked, when public attention tends to focus on specific problems.

We think so much in terms of programs to deal with those ad hoc, immediate problems, and rightly so, but over the long pull, we feel that the better institutional base for environmental management is one of the very basic fundamental goals which we must achieve.

The annual environmental quality report deals at some length with problems of interest to this committee. It includes analyses of the sources, effects, and major problems of water pollution, air pollution, and solid waste.

In the field of water pollution, vigorous and effective enforcement of water quality standards is necessary, as this committee well knows. The first need is to strengthen the legal basis for enforcement.

This committee has devoted much time to an examination of the administration's proposals which would extend Federal jurisdiction to intrastate and ground waters, streamline the conference hearing procedures, establish effluent requirements, and authorize fines up to $10,000 a day.

We understand that this committee is working on legislation along these lines.

However, a strengthened legal basis is only the first step in enforcement. To be truly effective, enforcement must be triggered by information from an adequate information system. States, municipalities, and industries should systematically be warned of violation of standards.

If action does not follow, and if extenuating circumstances do not exist, the Federal Government should automatically seek court action.

The successful control of air pollution requires strengthened legislation, as does successful control of water pollution.

I know that this committee has been working long and hard on proposed amendments to the Clean Air Act, and I hope that you soon will be reporting them out of committee.

The automobile is clearly the number one air pollution problem. The President has proposed legislation to provide for certification of assembly line vehicles to assure that emission control standards are met.

The Council on Environmental Quality is overseeing an effort to develop nonpolluting alternatives to the internal combustion engine. However, there is still a need to insure that once new model vehicles are certified as conforming to the standards, they continue to meet the standards under actual operating conditions.

The Council report states that alternatives to assure continued control of motor vehicle emissions under actual road conditions should be evaluated.

The international dimensions of the air pollution problem should not be overlooked. The report contains an entire chapter devoted to man's unintentional modification of world climate.

The discharge of particulates and carbon dioxide to the atmosphere could have dramatic and long-term effects on the world's temperature with many major consequences.

The United States should take the initiative in forming cooperative arrangements to control air pollutants that could have widespread effects.

As this committee has recognized, we need to develop much better techniques for disposing of solid wastes. We must also aim at reducing the volume of material which is considered waste by encouraging maximum recycling and reuse of materials.

The Council is working with a number of Federal agencies to develop a recycling strategy and is studying a variety of special disposal problems, such as nonreturnable bottles.

These are just a few of the many recommendations which our report makes. However, the significance of the document lies as much in its total coverage as in any of its specific recommendations.

We have tried to view the environment as a whole, and we have dealt with some of the root causes of environmental problems such as population and economic growth and land use.

While there are many specific actions which must be taken, there is also a need to improve our thinking about the environment so that the interrelationships among problems are recognized and so that we do not create new problems by our attempts to solve existing ones.

I would like to introduce the subject of the role of our Council by reviewing briefly the steps taken this year to improve the Federal Government's ability to deal with environmental problems.

In recent years, our Federal institutions responsible for environmental quality have been handicapped by organizational arrangements poorly suited to effective programs. There has been need for improvement in at least three areas.

First, there has been the need to focus environmental policy development and analysis of trends and programs. Since many problems of the environment cut across the responsibilities of a number of Federal agencies, no one entity had an overview function.

Second, environmental concerns have often been slighted when agencies pursue their primary missions with inadequate attention to side effects.

For example, the agencies constructing highways, dams, or airports are chiefly concerned with economic and engineering feasibility.

Such quantitative factors have tended to overshadow consideration of the environmental impact of proposed projects.

Finally, as pollution control programs have grown in scope and authority, effective management has become increasingly difficult.

Different agencies carrying out similar pollution control functions such as standard setting, research, monitoring, and regulation have grown up piecemeal.

There has been progress this year in all three areas. The establishment of the Council on Environmental Quality under the National Environmental Policy Act—Public Law 91–190—has provided a focal point in the executive branch for the development of environmental policy.

The Council's ability to perform its functions has been significantly strengthened by the passage of the Environmental Quality Improvement Act of 1970—Public Law 91–224—which your committee initiated. This legislation provided for the Office of Environmental Quality and staff support to the Council.

The Chairman of the Council on Environmental Quality serves as Director of the Office and in practice the provisions of the two acts have meshed together in a highly useful way.

Public Law 91–224, for example, provides useful contracting authority and flexibility in the hiring of specialists and experts.

This additional legislation brought the total authorization for the Council and the Office to $800,000 for fiscal year 1970; $1,450,000 for 1971; $2,250,000 for 1972; and $2,500,000 for 1973.

For fiscal 1971, the administration requested funding up to the full amount of our authorization. That is, $1,450,000 and an additional $50,000 for the Citizens' Advisory Committee on Environmental Quality.

As you know, Congress recently appropriated a total of $1 million for the Council and Office and for the Citizens' Committee.

Section 102(2)(C) of the National Environmental Policy Act has helped meet the second deficiency which I noted in the Federal Government's organization with respect to environmental issues—environmental impacts of Federal action were being overlooked in decisionmaking.

Section 102(2)(C) requires Federal agencies to include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment a detailed statement on the environmental impact of the action, adverse impacts that cannot be avoided, alternatives, the relationship between short- and long-term uses, and any irreversible commitment of resources involved.

These detailed statements are to include comments of State and local environmental agencies as well as appropriate Federal agencies with environmental expertise.

The statements are to be made available to the Council on Environmental Quality, the President and the public.

On April 30, the Council issued interim guidelines for the preparation of environmental impact statements, requiring each Federal agency to establish internal procedures for implementing this provision of the act by June 1, 1970.

These interim guidelines have been published in the Federal Register, under date of May 12, as I recall.

In response to these guidelines the agencies have been developing internal procedures to implement section 102.

At the same time, with help from the supplementary staffing authorization contained in the Environmental Quality Act, we have been developing our own staff capacity to review agency programs with particular impact on the environment, to evaluate the section 102 statements that have been filed and to identify actions which should be covered.

With this foundation we should be able to assess the overall effectiveness of the section 102 procedure.

In our view, it would be desirable to get another 6 months or so of experience before considering the desirability of any change in the law.

Our guidelines have only been in effect for a short period, the agencies' own internal procedures are even more recent. We are only now beginning to have an opportunity to develop actual operative experience with these new procedures.

Having said this, I would like to underline the understanding of the Council on two points that have occasioned some debate:

First, it is our understanding that section 102(2)(C) contemplates preparation of the impact statement and its circulation for comment by the relevant agencies early enough to affect the decisionmaking process before the action is taken.

We believe this interpretation to be consistent with and, indeed, required by, the statutory requirement that the statement "shall

accompany the proposal through the existing agency review processes."

Secondly, we believe section 102(2)(C) to be a remedial provision that should be applied, to the fullest extent possible, to further actions even though they may be part of a sequence started before January 1, 1970.

As our guidelines put it with respect to existing projects and programs:

Where it is not practicable to reassess the basic course of action, it is still important that further incremental major actions be shaped so as to minimize adverse environmental consequences.

It is also important in further action that account be taken of environmental consequences not fully evaluated at the outset of the project or program.

Finally, with respect to the section 102 procedure, we have not limited our operating responsibility simply to the issuance of formal guidelines.

On the contrary, we have endeavored to develop and maintain close working relationships at the staff level with the key agencies.

The third gap in our Federal organization to handle environmental problems I mentioned—the fragmentation of our pollution control operating programs—is proposed to be redressed in Reorganization Plan No. 3, which would consolidate our major operating pollution control programs in a new, independent Environmental Protection Agency.

This consolidation is based on the same concept of an independent environmental standard-setting and protection agency as the proposal authored by Chairman Muskie and cosponsored by members of this committee.

Our Council strongly supports the plan of reorganization. We see no conflict between the missions of EPA and the Council on Environmental Quality. Indeed, the two organizations should be mutually reinforcing.

The Council is not intended to have operating responsibilities, and its functions are to advise the President with respect to environmental policies and to coordinate all activities of Federal agencies related to environmental quality.

EPA, on the other hand, will be responsible for executing antipollution policies and for carrying out the many functions involved in controlling pollution.

It will assist the Council on Environmental Quality in developing and recommending to the President new policies for the protection of the environment.

There is also a difference in the scope of concern of the two agencies. The Council is responsible for the environment, broadly defined. This includes such subjects as population, land use, and conservation.

I believe that our annual report, before this committee, bears out that scope of concern and responsibility to which I have alluded.

The new agency, on the other hand, will focus specifically on pollution control, which is only one part of the Council's responsibilities.

However, the creation of EPA will be a significant building block in achieving the comprehensive view of environmental matters which the Council has tried to encourage.

Apart from these matters of the Federal Government's organization and procedure to handle environmental issues, the Council has been involved in a broad variety of environmental policy questions which I will mention briefly.

In his February 10, 1970, message on the environment, the President directed the Council to provide leadership in the areas of agricultural pollution, the research and development of nonpolluting power sources for the automobile, the problem of junked automobiles and the recycling and reuse of commonly used materials.

In a subsequent message to the Congress on pollution in the Great Lakes and the oceans, the President also directed the Council, in consultation with other Federal agencies and State and local governments, to develop a Federal policy and program for controlling disposal of wastes in the oceans.

The Executive order which directed Federal agencies to undertake an extensive program for bringing Federal facilities into compliance with air and water quality standards also assigned the Council continuing responsibility to oversee implementation of the order.

In addition to these Presidential directives, the Council is involved in a number of other activities. It participated with other agencies in the development of the President's proposals to control and prevent oil spills from waterborne transport.

It is currently working with a number of Federal agencies on proposals for improved control of pesticides, noise, and mercury pollution; reduction of phosphates in detergents; and pollution control programs in the Great Lakes.

A number of our projects relate to assignments made to the Director of the Office of Environmental Quality in Public Law 91–224.

For example, we are giving priority attention to review of existing environmental monitoring systems, the development of improved indicators of environmental quality and establishment of comprehensive environmental monitoring systems.

Second, the Council is evaluating the impact of a wide variety of Federal programs on development and growth of areas, the sufficiency of land-use planning and control at State and local levels, and alternative institutional and control mechanisms for better land-use management.

Third, as an aspect of the impact of new technology, the Council is giving attention to the growing levels of toxic substances in the environment resulting from new and complex manufacturing processes and is evaluating alternative methods of pretesting and controlling these substances.

In the Council and the Office of Environmental Quality, the President now has a permanent staff in the Executive Office for the specific purpose of evaluating the effects of Federal programs and policies on the environment and for developing environmental policy recommendations. We have built this staff capacity slowly and carefully.

Mr. Chairman, I am particularly proud of our Council's staff.

As you might imagine, the nature of our responsibilities has excited interest throughout the country, and we have received literally hundreds of applications for employment.

We have been able to accept, of course, only a few of the many outstanding candidates. I believe the group we have put together is exceptional.

The First Environmental Quality Report shows that much can be done to prevent some of the worst forms of environmental deterioration.

If I might go back to the staff again for a moment, Mr. Chairman, we have—I think it would be of interest to this committee—about seven interns working with us this summer, which I suspect, given the total number of our staff, may represent a higher proportion of interns than any other agency of the Government, and this has been a highly successful endeavor on our part.

The young people come from law school, colleges, and I believe one high school, and they have worked out absolutely splendidly, and have made a substantial contribution, in fact, to the work of the Council during this month, and I think speaking for the Council, we will miss them when they go.

Senator MUSKIE. They are good. I have 38.

Mr. TRAIN. You have 38. Well, perhaps you have larger resources than we do. [Laughter.]

Senator MUSKIE. That certainly reflects my lack of resources. I have to reach out and get them; but they are good, delightful.

Mr. TRAIN. And I would like to mention, also, that yesterday, the President had our entire staff to the White House, at noon, and he met with the entire staff, professional, secretaries, interns, temporary people on loan from other agencies to help on the report, and so forth, and the President was able to speak with and meet each single individual, and this was, I think, a very inspiring occasion for the staff.

Senator MUSKIE. How large is your staff, at this point?

Mr. TRAIN. We have at the present time, if I could focus on full-time professional people, approximately 17, of whom either two or three are on detail from other agencies on a rather long-term basis, and we have one Foreign Service officer, for example, working with us, on international programs.

Senator MUSKIE. How large a staff will you be able to assemble under the appropriation—already approved by the Congress—of a million dollars?

Mr. TRAIN. Our expectation and plan, under the requested appropriation, had been a staff in both professional and clerical, totaling approximately, as I recall, 54.

Now our reexamination of the state of the Council's economy, based upon the recent appropriations, would indicate that we probably would have to cut this back to about 39 personnel all told, and I believe a second serious effect would be an almost complete erasure of our capacity to enter into contracts, because I think that we would, if forced to a choice, rather put the available funds on strengthening our staffing, rather than on outside contracts.

Senator MUSKIE. I think this entire committee sympathizes with your need for the full funding that you have requested. I think this view is shared by Senator Jackson and his colleagues; perhaps we can mount an effective effort to get full funding for your work.

I think it is terribly important that you get off to a good, solid start with the adequate staffing. From my understanding of the problem and of what needs to be done, I am sure you have not been excessive in your request.

Mr. TRAIN. Thank you, Mr. Chairman.

We believe, on this point, that looking ahead, and looking to the authorizations for subsequent years, it is very important to build the staff in a methodical fashion, and our own analysis is that the kind of staff level which we had requested for 1971 is fully within our ability to manage and make effective use of, and we have kept away, I think, from seeking large levels of staffing and funding simply for the sake of large levels.

Now, the levels requested are those which we believe we can effectively use at this time, and would represent a very important step in our development as an effective instrument of government.

I will return to the beginning of this paragraph.

The first environmental quality report shows that much can be done to prevent some of the worst forms of environmental deterioration. As it spells out in detail, much improvement can be accomplished despite serious deficiencies in research and monitoring.

In the foreseeable future, it is reasonable to expect to be able to slow or to stop environmental degradation, especially air and water pollution. Many essential steps toward this end have been proposed by the President and are awaiting action by the Congress.

Our report lists a number of specific recommendations for the directions in which we should move in the future.

We believe that the annual environmental quality report should be of considerable use to your committee by providing a regular survey of our environmental problems and measurement of our progress.

It should also aid your work by fostering greater public understanding of the nature of environmental problems and the prospects for taking action to control them. Improved monitoring systems and the development of indicators of environmental quality should also prove as useful to your committee as to the Council.

I will conclude this first appearance before your committee by saythat we have valued the sustained support and interest of this committee and the help we have received from many quarters.

We are conscious of the many contributions made by the Congress to our understanding and better handling of environmental problems. This committee, in particular, has played a vital role in the development of our pollution problems programs and deserves much credit for the progress that has been made.

Thank you, Mr. Chairman.

Senator MUSKIE. Thank you, Mr. Chairman.

I suggest to my colleagues that we might invoke the 10-minute rule on the first round of questions. That may consume the questions, although I doubt it, and then we will proceed from there.

With respect to the air, water, and solid waste proposals in the report, I gather there are no new recommendations in this report.

The recommendations are those submitted to us by the President earlier this year, and upon which this subcommittee is now working. Am I right? I detect no new recommendations.

Mr. TRAIN. No, but there are a good many new directions which we recommend, Mr. Chairman.

Senator MUSKIE. I mean legislative recommendations.

Mr. TRAIN. Specific legislative recommendations for action now are restricted to those already pending before Congress.

In addition, the Council has set out in varying detail a large number of recommendations for the directions in which we should be moving

in all of these programs. I think in the pollution sections alone, we have some 50 proposals for action. But we have not set these out as "must" legislative items at this time.

Senator MUSKIE. No, I understand the distinction. I wanted to be sure we didn't overlook any specific legislative proposals at this time.

The reason I put the question—in addition to wanting to identify the nature of the report in this respect—is this: We still are discussing in this committee the air pollution legislation. From the testimony that we received in 10 days of hearings, from much that we have learned about the urgency of the problem this year, and from the reaction of the public to the problem, we have felt a responsibility to refocus on some of the legislative proposals which the President introduced, which I introduced, which other Members of the Senate introduced, to determine whether there are better answers than those contained in that initial legislation.

We are conscious that leadtimes are vanishing for us, and the policy we write this year is policy we are going to have to live with and work with for some time in the future; and so we want to be sure that we have the best answers that we are capable of putting together this year.

Because the committee hasn't reached agreement yet on what concepts we ought to write into the law, I don't know if I can bring out all of the options that we are considering, but we may get into some of them, if we have enough time.

Mr. TRAIN. We certainly wouldn't wish to discourage this committee from acting affirmatively on any of the additional proposals which the Council has set forth.

Senator MUSKIE. No, we look at those, too.

Mr. TRAIN. We feel that they very definitely deserve careful consideration, and the President himself has said that, in his letter of transmittal.

Senator MUSKIE. May I ask this question: Have you developed a sufficient expertise in your own staff to get into specific legislative proposals, in the air pollution field, for example, or do you rely upon the Air Pollution Control Administration to develop specific legislative proposals which appear in your report?

Mr. TRAIN. We do have expertise within our own staff, in the field of air pollution.

Naturally, we also do look to the responsible program agency for a great deal of technical support in the air pollution field, as well as others.

So it is neither one or the other, but we do definitely have our own staff competence in that particular field.

Senator MUSKIE. In due course, then, I suspect that the committee will be in touch with you, as well as the Air Pollution Control Administration, to test whatever new concepts the committee has agreed upon.

May I say this: I realize, out of the months that have passed since last January, that there is a tendency to think of the development of ideas in this field as an exercise in partisanship.

That is understandable, I suppose. But these ideas really don't fall under those labels very comfortably, or very usefully. We welcome ideas. We deal with them in our committee on a nonpartisan basis. That doesn't mean that we are not going to disagree with each other,

or with the Administration, but I think we have got some hard decisions to make in this situation, and we can't hope to make them if the basis of our judgment is political partisanship.

That is our attitude, and I am sure it is yours. At least, that has always been my reaction to your approach to the problem.

We hope to have a tough air pollution law, and we may ask for your reaction to it before we reach our own final decision.

Mr. TRAIN. Well, we may have differences in detail, Mr. Chairman, but I assure you that the Administration also wants a tough air pollution law, and will be happy to cooperate with this committee in helping to produce such legislation.

Senator MUSKIE. I would like to ask two or three questions related to your testimony, if I may. You spoke about the need for international cooperation in this field, and I must say I compliment you for focusing upon that need.

There is an international problem, it seems to me, which falls right in the context of your comments. The most obvious basis for international action, of course, is the effect on the atmosphere of the earth, which doesn't distinguish between peoples on the basis of political boundaries.

As far as long-term, world-wide weather effects are concerned, there are reports that the operation of the SST at high altitudes will emit water vapor which will have profound effects on world climate. Whenever questions of this kind are raised, the usual argument that we get in response is that the SST is necessary, because of competition from abroad, and because of the possible unfavorable impact upon our balance of payments if some other country develops before we do an SST that is attractive in the world market.

If the SST has these po'ential atmospheric effects, we ought to be looking toward an international judgment on whether it should be developed on a competitive basis. An agreement among all the nations to drop the SST might serve the needs of humanity better than competition among the nations to build it.

Would you have any comment on that?

Mr. TRAIN. Well, on two points: We certainly agree wholeheartedly on the importance that international cooperation bears to this whole business of producing a better environment for all people. The problems are global, in many cases. Atmospheric problems, and, of course, related climatic problems, that an area such as Europe, of course, river basin problems are frequently international in nature. Of course, in our own case, the problems of the Great Lakes are international in nature.

In very many ways, problems of the environment can only be gotten at effectively by international initiatives of various kinds, and we strongly support a leadership role on the part of the United States, worldwide, in the fight for a better environment.

On the second point, with respect to the supersonic transport specifically, the uncertainties as to possible atmospheric impact of the operation of a commercial fleet of supersonic transports sometime in the future are certainly of a kind which lend themselves naturally to international cooperative efforts, leading to the resolution of those uncertainties, and in the testimony which I presented on May 12, I think, before the Joint Economic Committee on behalf of the Council, I stressed the desirability of international discussions of the various

possible long-range atmospheric consequences in particular, and also noise characterisitcs of the SST.

Senator MUSKIE. The report on page 99 says, "Further study is necessary to better determine the effects of supersonic jet transports in the stratosphere before they are mass produced."

And on page 127, you have similar comments on the noise effects to which you referred. And we are now considering in Congress—this subcommittee held hearings recently—on an international agreement to deal with the consequences of oil spills.

It seems to me that our Government might well take the initiative and raise the question of the SST as another environmental hazard with international implications.

All of the momentum is on the other side; that is, in the interest of international economic competition, we have got to be at the head of the race, and to do that, we have got to build.

It seems to me we might well take the initiative to raise these environmental questions with governments of the other countries involved—the Soviet Union and France—to see whether it is in the interest of mankind to go forward with this kind of technological development.

As the report emphasizes over and over again, in a sense, the environmental crisis of today is the product of heedless and headlong technological development. The SST represents and symbolizes this very thing. It gives us an opportunity, it seems to me, to focus internationally upon the kind of rearrangement of values that your report represents domestically here at home.

I don't know that you have any role or any influence in the international area, with respect to the State Department, the White House, or any other agency of the Government that might be able to take such an initiative. But if you have, I would urge its consideration.

Mr. TRAIN. Well, we very definitely do have a role. The President has confirmed this by the Executive order which he issued shortly after the Council was set up by legislation. The legislation itself didn't address itself expressly to the international aspects of the environment, although I think the legislative history indicated the intent of Congress quite clearly, to the effect that the Council should concern itself with the broader international concerns.

As I mentioned in my testimony on the supersonic transport, in addition to proposing international discussions, which have taken place on a very informal basis so far, and which we would recommend be carried out on a definitive basis, and a positive scale, in the near future, we have also suggested the possibility of this kind of technological development being the subject of discussions at the 1972 United Nations Conference on the Problems of the Human Environment.

We have had very informal discussions, again, with officials of both France and Great Britain on this general subject.

You will also recall, I think, that in my testimony of May 12 we, in pointing out some of the more significant, as it seemed to us, environmental uncertainties, recommended a concerted research effort on the part of the Federal Government, to address itself to those uncertainties, hopefully to lead to their resolution, and the Department of Transportation has developed, and I believe has discussed with

the appropriate committees, a fairly comprehensive research package, costing, I think, in the neighborhood of 26-plus millions of dollars, which our Council has reviewed and, based on that review, feels is responsive and does address itself to the environmental questions which we believe should be answered.

Senator MUSKIE. With respect to the SST.

Mr. TRAIN. Yes.

Senator MUSKIE. Should they be answered before we proceed with further investment of public funds?

Mr. TRAIN. Of course, this represents a judgment involving a great many matters that this Council really does not consider itself appropriate to offer public conclusions on, such as balance of payments, technological spinoff, airframe sales, and things of this sort, or the competitive situations with other aircraft.

We really are not experts in those particular fields. We have looked at the prototype program, which has been proposed by the administration, which calls for the design, development and, I believe, 100-hour-or-so flight testing of two prototype commercial supersonic transports, and we believe that those prototypes, in and of themselves, raise no significant environmental problems at all, assuming that the flight testing is carried out under reasonably appropriate control circumstances.

Senator MUSKIE. Perhaps you can answer this question, then: If the environmental risks which the report refers to in connection with the SST are not resolved, should we proceed to build it and operate it?

Mr. TRAIN. It is always difficult to look ahead, but I would risk stating this amount of looking ahead, and that is, if it is the conclusion of this Council, following research, reasonable research efforts, over the next 2, 3, 4 years, whatever is available, if it is then determined that there are remaining significant environmental uncertainties, then I have no question in my own mind that this Council would recommend against the development of a commercial fleet of SST's at that time, until those uncertainties were resolved.

That is our present position.

Senator MUSKIE. With that advice, I think, the Congress is in a better position to decide whether to invest more money in it at this time. That is a decision for us to make.

I have used more than my 10 minutes, but I will be back.

I yield to Senator Boggs at this time.

Senator BOGGS. Thank you, Mr. Chairman. You are very good to follow the 10-minute rule. If you want to pursue your questions at this time, I will be glad to yield back to you.

Senator MUSKIE. No, I was going to shift to another subject.

Senator BOGGS. Very good. I want to say once again, Chairman Train, that I have been impressed with this First Annual Report of the Council. In the brief time that you have had it it has been very difficult to cover the whole subject. You have covered it well. The report's format, I think, is helpful to Members of the Congress, as well as to State and local organizations, citizens' groups, and advisory groups.

I can't imagine a question I receive more often—certainly in the last year—from citizens all over the country: "What can we do?" your approach and your format is very good. It will help me to answer those questions. This First Annual Report is going to help to accom-

plish a lot of progress in itself. Out of all of it, we are going to make some great forward progress toward environmental enhancement.

I didn't intend to take up all this time making a statement, Mr. Chairman. This subcommittee, under the outstanding leadership of Chairman Muskie, since 1963, when the committee was organized, has been seeking answers to these environmental issues. I believe we have made significant accomplishments during this period, under rather difficult circumstances. Maybe we have helped to develop public recognition of the problem, recognition that something must be done. Your report, I think, pulls together this whole picture. To me, this is very encouraging, and very pleasing.

The Council I realize, is not an operating agency. But there must be a lot of twilight areas, gray area between the Council and the operating agencies. Several persons were in my office this morning from Dover, Del., who have been working on the problem of waste crankcase oil.

About a billion gallons of this waste oil is discarded. Some of it is used. Some of it is collected. But a lot of it—hundreds of millions of gallons—is not accounted for. It is presumed that it gets into streams and sewers and into the ground. Has the Council directed any attention to this subject? Do you have any observations on the need to recycle this waste oil as one example of the things we must examine that pollutes the air, the water, and the land?

Mr. TRAIN. Well, we certainly recognize the problem of waste oils as one of the more important of our waste problems, and the Council has been directing attention to this.

We have set up an interagency task force, with representatives of the various departments that are concerned with the problem. For example, HEW, Interior, Treasury, Commerce, and the Federal Trade Commission, and we are working with them, taking a look, to get a better understanding of what causes the problem, what the economic forces are that are at work here, and what possible economic incentives or disincentive could be generated to help meet the problem, but we are by no means at any point of conclusion on this at this time.

Senator BOGGS. I commend you for that. It encourages me that you have this problem in focus. I think that it is one example of how we can accomplish a great deal in control of air, water, and land pollution. I commend you on that.

Your report discusses the need for land-use planning. That is certainly very important. Could you discuss how such planning is complemented by the imposition of regulations dealing with air and water quality standards? Although land-use planning is not necessarily before this subcommittee, it seems to me that the air and water pollution control regulations already enacted, would have a considerable impact on land-use programs.

Mr. TRAIN. There is obviously—I think this committee is well aware of it—a very close and intimate relationship between air, water pollution programs in particular, and wise land-use, and one need only look at the air quality impact of highways, expressways, in the close proximity to our metropolitan areas, to see one example.

The siting of power-generating plants is another exceedingly important example of the relationship of pollution problems to land use, and I think this, the latter one in particular, is an area in which we must be moving forward very, very shortly, and we, here again, are

working closely in this case particularly, with the Office of Science and Technology, Dr. DuBridge's group, on the development of appropriate Federal policy in connection with the siting of electric generating plants for later submission to the Congress.

Senator Boggs. Very good. Mr. Chairman, our time is moving on. I yield the balance of my time to you and my other colleagues.

Senator Muskie. Senator Spong?

Senator Spong. Mr. Train, the battle for a better environment has been very gleefully joined by Madison Avenue. We hear jingles every day about lead-free gasoline. I don't know the effect of lead-free gasoline on either the environment or on one's automobile, but I hear of it daily.

Just around the bend, I foresee phosphate-free detergents being sung about. Do you believe that the Council has any power or responsibilty to the public or to the Congress, to try to comment upon what might be called fraudulent advertising in this area, either to the public or to FTC or the FCC?

Mr. Train. I think we certainly would have a responsibility to work closely with the appropriate regulatory agencies, and I suppose this would be mainly the Federal Trade Commission, and if anything of this sort came to our attention, we certainly would take it up with the FTC.

Senator Spong. On pages 9 and 10 of your prepared statement, you speak of section 120. That section was employed, was it not, in the decision to dump the nerve gas in the Atlantic Ocean?

Mr. Train. Yes. You said "employed," and I want to comment on the use of that word, because——

Senator Spong. Well, use your own, if you will.

Mr. Train (continuing). Because it is a section of the statute which is self-operative. It comes into play whenever any Federal agency is recommending any major action with potential significant environmental impact, and these are submitted to us.

Such a statement was submitted by the Department of the Army to the Council. The Council has commented to the Department of the Army on its statement, pointing out certain deficiencies which we felt of a procedural or technical nature in that particular section 102 report.

Senator Spong. As I recall, from listening to testimony, the report dealt possibly with the chemical aspects, but told us very little, and possibly that is because of lack of knowledge as far as everyone is concerned, about the biological effects.

But what I would like to ask you is: Was that report prepared and circularized for comment early enough to affect the decisionmaking process before the action was taken?

Mr. Train. The report was initially submitted to the Council in draft form on the 8th of July, and a final version was submitted to the Council on the 30th of July, as I recall, and during that period, although only before us in draft form, our staff did have occasion and opportunity to comment on and discuss with the Department of the Army's staff various aspects of the project.

It is hard to state, in any case, whether sufficient time has been given. In a case that is as complicated and controversial, necessarily, as this kind of project, I would say that the 30-day period which our guidelines provide is probably on the short side.

I hesitate to generalize. I think in many cases, the answer to that question would turn upon the completeness of the information provided in the first instance, so that in this case, where we felt there were some deficiencies of information, the period probably was not long enough.

Senator SPONG. Well, this will certainly be one of the decisions that you will have under review in your 6 months' study that you referred to.

Mr. TRAIN. That is correct.

Senator SPONG. Senator Boggs questioned you about land use.

In your statement, you referred to land use as one of the root causes of environmental problems.

Senator Muskie, in his opening statement, said that any land-use policy that failed to consider the existing Federal system would not be better than no policy at all.

Has the Council focused upon land-use policy to the extent that you have commented on what you see as the role of the States in the formulation of this policy?

Mr. TRAIN. In a very general way, I would comment. And we are actively engaged in looking at this whole, very complex area of land use.

I think the chapter in our report on this subject indicates the scope and complexity of this problem. It is not a single-shot kind of thing. It involves a whole range of functions and responsibilities.

I think we can be absolutely certain that under any allocation of responsibilities, there is going to be a very important role for the Federal Government, for State governments, and for local governments, in land use.

I don't think there is any suggestion, when we talk about a national land-use policy, that Washington take over all responsibility for all land-use decisions at the local level. Obviously not.

Now, if there is a major shift in the allocation of responsibilities that is needed, I would say that this would be a shift of some responsibility from the local units of government, both municipality and county, back toward the State.

So many of the problems of land use, with which we are all becoming increasingly familiar, extend by their very nature well beyond the boundaries of the particular political entity which may have, in fact, the responsibility.

The town has a responsibility, but the impact of its decision goes far beyond that town, so that we have to, in some fashion, institutionalize this broader kind of responsibility for dealing with these problems, on a regional basis, and in many cases, on a State basis.

As you know, in most States, all zoning authority resides in the local unit of government. Sometimes towns, sometimes county. And none in the State government. There is very definitely a trend in the other direction underway. Some States have already established, I think—about two States have a State zoning law.

There is also the taking back of authority in some States over specific kinds of zoning, such as flood plains zoning, shoreline zoning, in the State of Wisconsin.

I think these are indicative of a growing recognition that these problems have a much broader geographical makeup than can be adequately handled by most local units of government.

So I would say this is the major direction I would see in the years ahead, in terms of the allocation of responsibility between different units of government. It is apt to be very controversial, as you all certainly are aware. I mean, this is a very jealously guarded prerogative of local government, and local governments and local communities should play a very significant role in the making of decisions that so significantly affect the well-being and futures of their own communities, so there is a balance here of interests and of responsibilities that must be achieved.

Senator SPONG. Thank you, Mr. Chairman.

Senator MUSKIE. Senator Dole.

Senator DOLE. Let me say as others have said that I certainly appreciate what I consider to be an excellent report. It should be very helpful.

I have been viewing with great interest the very excellent series on the CBS Morning News concerning radiation. The series of features was apparently timed to coincide with the 25th anniversary of dropping the atomic bomb. It has been particularly interesting to me, because Kansas may become a dumping ground for atomic wastes.

We are eager to have new industry in Kansas, but we have some qualms about our abandoned salt mines becoming a dumping ground for atomic wastes. Some serious questions have been raised on the CBS programs this week.

Do you have any jurisdiction in a situation like this? Does this fall in the same category under section 102 as the so-called nerve gas question?

Mr. TRAIN. Yes, certainly, Senator. Any program for the below-ground disposition or storage of large amounts of radioactive wastes would, in my opinion, call for the preparation of an environmental impact statement, under section 102 of the National Environmental Policy Act, and submission to our Council.

And I think as you know, the act also contemplates that in the preparation of such statements, the comments of other agencies with expertise or jurisdiction in a particular matter is required to be gotten, as well as the comments of State and local governments that may be involved in some way in the particular project.

So that there should be, in the process of developing a decision in this area, full opportunity for the people of your State and the communities concerned to make their views known fully.

Senator DOLE. There appears to be a great potential for storage of solid wastes in Kansas, because of the salt mines. They appear to be ideally suited, at least according to the AEC, for safe storage for hundreds and hundreds of years.

It was pointed out, on this morning's program, that because of a so-called melting process at a facility near Detroit, Mich., a few years ago, there was some serious talk about a total evacuation of the city of Detroit. There were also estimates of possible destruction, contamination, as well as physical injury and death, which were very frightening.

It is a very serious problem, because we are building more and more atomic reactors, and they are larger and larger, and apparently, every day of production means a problem that extends for as much as 200 years.

In a bill recently passed by this committee, and I understand it is now awaiting action by House and Senate conferees, at least, waiting for the House to respond—Solid Waste Resource Recovery Act, we provide in section 212 a national disposal sites study, which would create a system of national disposal sites for storage of hazardous radioactive, toxic materials which might endanger the public health. The Environmental Protection Agency would have jurisdiction in the event this program becomes operable.

I do not criticize the AEC, but it does appear that some independent review would be most helpful, because they are in part a party in interest, not only developing reactors, but disposing of the waste. We have had some very serious questions raised in our area, and I am certain they have been raised and will be raised in other parts of the country. The chairman raised some questions, just last week, about the potential hazards of disposal of liquid or solid atomic wastes.

Dr. MacDonald, do you have any comment on that area?

Mr. MacDonald. I would, of course, like to distinguish between the disposal of the waste and the reactor accident that you referred to, or a potential accident in Detroit.

However, we will certainly be reviewing the AEC's 102 statement, when they have prepared it, and as Chairman Train pointed out, there will be an opportunity at that time for a really rather wide-ranging discussion of the whole issue of the disposal of waste.

It does underline one point that we consider very important: That as one develops new technologies, it is important to look way ahead, to the whole process. It is not just the creation of electrical power, but everything that goes with it, and when we talk of a national energy policy in the report, it is addressed just to this question, and we can't just look at the building of a particular powersite, but how that fits into overall national needs.

Senator Dole. I agree with that, and I think the report indicates that there have been some shortcomings in looking at the entire problem.

We have looked at the consumers' interests, and production, the national energy policy, creation of power, and I assume at the same time, disposal of the waste, but perhaps not in the priority that it deserves.

There are questions being raised, again, on that same television program, which to me appear to be most interesting. It was not suggested that we were near a crisis point, but there are areas where we have liquid atomic wastes stored, and the tanks are corroding, and the question, very properly raised, is how much time do we have, and what policy do we have to deal with the problem?

The other side of the coin, of course, from AEC, is that there really is no danger, there was no danger in Detroit, there was no danger in Washington. There have been instances, I think, in Idaho, where three persons were killed because of some accident—I don't understand this melting process, but at least there is potential danger.

This may not ever cause any harm, but the threat is there, and it is encouraging to me to know that the Council, the EPA, and the provision in the Resource Recovery Act will provide more review of this very important problem.

Mr. Train. You know, I will just add on that point, Senator Dole, that the AEC's own agency procedures, which have been adopted and

published for compliance with section 102, specifically list designation of disposal sites as one of the programs which will call for a section 102 statement and its submission to the Council by the AEC.

So the agency itself very definitely recognizes that this kind of program which we describe comes under the requirements of that section.

Senator DOLE. Well, I say very seriously that there is a site now in central Kansas, which if approved—it has been under study for 7 years or longer—would have some economic impact in the area. But there is some reluctance, bipartisan reluctance—a Democratic Governor and Republican Members of Congress—to encourage this type industry, and I think it is much like the nerve gas. There are many opportunities to bring in a little industry, if you want nerve gas in your State.

But there also need to be some meaningful assurances that nothing will happen. I am not certain it is possible to ever guarantee that you can store solid wastes or liquid wastes, but at least, the people of Kansas appreciate the fact that there will be additional review.

Thank you.

Senator MUSKIE. Along that line, Senator Dole, there is an interesting little story in this morning's Washington Post based on a Reuters dispatch. It is short, and I think it is worth reading:

> London, August 10th: Police today toured vacation resorts in the Isle of Wight off Britain's south coast to warn swimmers of lethal gas after cannisters containing a corrosive chemical washed ashore on some beaches.
>
> The chemical, ferrous chloride, used in dye manufacture, gives off deadly hydrochloric gas when mixed with water. The manufacturers believed that the one-gallon cannisters were dumped at sea several years ago. It was normal practice to puncture the drums before disposal.

These foolproof methods of disposing of nerve gas, radioactive wastes, may turn out not to be so foolproof after all.

The time is rapidly slipping by, Mr. Chairman. It is clear we are not going to be able to get into all of the aspects of the report that we might like to, let alone all of the others that merit discussion.

I am going to try to concentrate on two or three other points that might be useful, and one of them relates to something the report says on page 53.

On that page, the report discusses the Federal Water Pollution Control Act. As you noted in your testimony, this committee is working on legislation proposed by the administration as well as other bills that have been introduced to strengthen that act. We all recognize the need to strengthen it.

But you say this in the report:

> Finally, the only force that the government can wield against a polluter is a cease-and-desist order. The court's only option in the case of noncompliance is a contempt-of-court action.

I think a cease-and-desist order, rather than an injunction, or a specific performance of relief, can be very effective tolls. I would like to suggest another—one that I gather the administration is turning to increasingly—and it may be the kind of policy question you would like to consider as a Council, in concert with the Water Quality Administration. This is the Refuse Act of 1899, in conjunction with section 21(b) of the new Water Quality Improvement Act of 1970.

The Refuse Act of 1899 says this:

> It shall not be lawful to throw, discharge, or deposit or cause, suffer, or procure to be thrown, discharged or deposited, either from or out of any ship, barge,

or other floating craft of any kind, or from the shore, wharf, manufacturing establishment, or mill of any kind, any refuse matter of any kind or description whatever.

Now, that was not written as an antipollution piece of legislation. It was legislation written to protect navigation. But nevertheless, it provides the authority to stop any discharge whatsoever.

Then there is a provision that reads as follows:

Provided that the Secretary of the Army, whenever in the judgment of the Chief of Engineers, anchorage and navigation would not be injured thereby, may permit the deposit of any material above-mentioned in navigable water, within limits to be defined and under conditions to be prescribed by him.

So there is a permit authority, that gives the engineers a handle on these discharges.

Under the language of that act, the conditions apparently relate to anchorage and navigation. But then we come to section 21(b) of this year's Water Quality Improvement Act.

It reads as follows:

Any applicant for a Federal license or permit to conduct any activity, including, but not limited to the construction or operation of facilities which may result in any discharge into the navigable waters of the United States, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or if appropriate, from the Interstate Water Pollution Control Agency having jurisdiction, certification that there is reasonable assurance, as determined by the State or interstate agency, that such activity will be conducted in a manner which would not violate applicable water quality standards.

What then, is the state of the 1899 law?

Congressman Reuss and I want to read this into the record. Mr. Reuss, in an excellent study, reported to the Congress on July 29, 1970—you might want to look at that—points out that the permit authority has not been used.

Table A, which is attached to his statement, "shows that there are no existing Corps permits for industrial wastes in 23 States." That includes mine, I might add.

And in all of those States, then, those discharges into navigable waters or tributaries of navigable waters are illegal at the present time. They are not operating under permits of any kind.

In Massachusetts, the only existing Corps permit was suspended on February 13, 1970, because of unspecified complaints by State officials. Except for New Jersey, California, and Louisiana, there are less than 25 existing Corps permits for industrial waste discharges in each of the remaining States and Puerto Rico.

The discharges covered include some of the Nation's producers of pulp and paper, synthetic fibers, chemicals, petroleum products, steel and aluminum.

Here is authority which, if used, could establish guideline controls, direct controls over all industrial discharges into navigable waters of the United States, those permits to be conditioned upon compliance with water quality standards set up under the 1965 Act.

I think it would be useful—and I am not going to ask for an off-the-cuff policy opinion from you on this—to consider this area of established authority. We are going to supplement it this year with additional law. It strikes me this authority—might be very useful to control more effectively the discharges of industrial wastes into our navigable waters.

Mr. TRAIN. Well, let me comment on that, Senator Muskie.

We are quite aware of the existence of this authority in the statute, and while it has not been used, as you point out, since the statute was put on the books in 1899, the Corps of Engineers has recently announced in, I believe, public hearings before another subcommittee of the Senate, that it intends to and in fact, is developing a program which would involve the use of this permit authority, and our Council is working closely with the Corps of Engineers, and the Department of Justice, and the Department of Interior—FWQA, specifically—to coordinate the various interests involved here, because as you point out, we are now also very much aware of the relationship between this permit authority in the 1899 Act and the certification requirement in the legislation section 21(b) which you mentioned.

And speaking insofar as the Council is concerned, we are fully in accord with the maximum use of the Refuse Act of 1899 and all other available tools to the Federal Government for the enforcement of water quality standards. No question about it.

And we believe that this permit authority does—although apparently it has never been used, really, over the years—it does provide a very significant kind of Federal leverage, and I would be hopeful that in a very short period of time—I don't know quite what I mean by that, perhaps a month's time—there will be a promulgation of an actual program.

But just exactly what the timing on that is, I can't answer. I would presume that this would address itself first to new facilities, rather than trying to deal in an ex post facto way, with what is it someone said? Some 50,000 plants scattered all over the United States already.

But with respect to new facilities, I would think that this program would get underway fairly soon, and be very effective, and would require the certification by the appropriate water standard administration of the various States.

Senator MUSKIE. It would be ironic, wouldn't it? Perhaps one of the most effective statutory tools we have is one written in 1899, for other purposes entirely.

Mr. TRAIN. I would also point out, of course, the cease-and-desist authority of the 1899 act is being employed. It is the basis of the action recently brought by the Department of Justice against some eight concerns in connection with alleged mercury violations.

Senator MUSKIE. That includes firms in my State.

Did you complete your statement on that?

Mr. TRAIN. Yes, sir; I believe I did.

Senator MUSKIE. Now on the question of new legislation, I would like to ask just one or two questions. My purpose is not so much to get, at this point, your definitive response to policies this committee is considering, but to test the flavor of your reaction to this kind of thing.

I think the most difficult problem we are facing in the air pollution legislation is the question of national deadlines of some kind to meet either ambient air quality standards or emission standards on a national scale.

And the single most important problem that we see in this is the automobile, which you have correctly identified in your statement as the single most important air polluter.

The problem is not the new automobile we have intended to focus on since the 1965 act, but the used car. There are 110 million of them on

our highways, and although there has been developed, add-on hardware of one kind or another, which initially, at least, might improve the environmental performance of used cars, the hardware involves considerable cost; $150 to $250 per car. There is also the problem of enforcing the attachment of this hardware to 110 million automobiles and the problem of leaded gasoline, which we still have, even though there seems to be increasing consensus that we ought to get rid of leaded gasoline because it affects the performance of these devices. There is also the economic burden on a lot of people who can't afford the added cost, who need the automobile in day-to-day work, and so on.

There are all sorts of other questions that arise, as we pursue the implications of a national policy.

But what is the answer? How do we clean up the performance of this huge used car population?

If we proceed under the present policy, even strengthened by the amendments which the administration has submitted, and others which we have submitted, what the Congress talks about is 1990. It will be that long before we have turnover in this used car population, before we get new technology on new cars manufactured in the future, before we begin to get a clean automobile in cities and urban areas.

Can we wait that long? Must we set what might appear to be arbitrary national deadlines, in order to increase the sense of urgency to develop the new technology or to find some substitute for the automobile in our crowded cities?

This is really a tough problem, with tough choices, that this committee is facing. We could simply try to accelerate the evolutionary process that we tried to set in motion with the 1965 act and the 1967 act, but that clearly is not going to move us along the road fast enough to deal with this automobile problem, in my judgment.

Has the Council really focused on this? Does it have some guidance to give us?

Mr. TRAIN. Well, the Council very definitely is focusing on this particular problem, Mr. Chairman.

The President, in his February 10 message, devoted quite a bit of attention, as you will recall, to the problem of automotive emissions, and I believe he singled it out as, if memory serves, the single most important problem that we had to deal with.

And he made a number of suggestions, but specifically, I believe, directed to your concern, he charged our Council with responsibility for coordinating the Federal Government's research and development efforts with respect to the development of what has been called unconventional vehicles, substitutes for the internal combustion engine, and the goal of that program, as established by the President, is the development of two commercially feasible alternatives by 1975.

And that is a goal toward which we are working, and there is a research and development program in this year's budget of $9 million, with primary responsibility in HEW, in furtherance of that goal.

Senator MUSKIE. But, you see, that is the evolutionary approach, and that is the one this committee adopted in 1965. It means, perhaps, that if you do develop those commercially feasible clean cars by 1975, the industry may be able to tool up and put them on the road in another couple of years. But in the meantime, we will be putting on the road unsatisfactory automobiles, from the environmental point of

view, for another 7 or 8 years, at the rate of 7 million or 8 million a year or more, thus perpetuating this problem.

The automobiles that were built under the guidelines established under the 1965 act simply haven't been satisfactory, from an environmental point of view. We wrote the law. We hoped that we would stimulate the evolutionary process, but the cars are not satisfactory now, and I suspect that 1975 may be as early as you could hope to get a prototype of the internal combustion engine. Maybe we could get an electric automobile, but if we get an electric automobile developed by 1975, what do we do about providing the electric power to fuel those cars?

We have had hearings in another subcommittee pointing up the dilemma that the power companies face, especially in the New York area, with respect to providing their present projected needs, let alone the massive amounts of power that would be needed to fuel an electric automobile.

What is the answer to this? Do we need to restrict the use of individually operated automobiles in our urban centers? Are we going to get some judgments from the Council on questions like that, say, in its second annual report?

I realize it is not a judgment you are in a position to make in this annual report. But how do you do it? We have just had this air pollution problem on the whole east coast within the last 2 weeks, and most of it was caused by the automobile. There is no other important source of pollution here in Washington.

We approached the air pollution alert stage here—in the District of Columbia. That was caused by the automobile. And in accordance with the administration's program, and indeed, legislation that we have written, it is going to be some time later than 1975 before we really begin to clean up the problem created by the automobile. Isn't that right?

Mr. TRAIN. Yes, that is correct, sir.

Senator MUSKIE. It isn't a satisfactory answer. I am not being critical of you. I am as frustrated as anybody else is.

Mr. TRAIN. No, I would hope not.

Senator MUSKIE. You have been in office 6 months. Another year, maybe we will blame you a little.

Mr. TRAIN. I am a little bit alarmed by the fact we only filed our annual report yesterday, and now you already have me worrying about the contents of the second annual report. We had hoped for a little longer vacation than that.

Seriously, in terms of the unconventional vehicle, you refer to the problems of the electric-battery-driven alternative, and I think that we have given this a very low priority at the present time, as a viable possibility.

It certainly would represent a major new demand on electric power, with all of the pollution side effects that we are all too familiar with, and I think our present best bet would be in the area of the steam turbine and gas turbine and hybrid vehicles.

You asked me whether we recommend a banning of the automobile, and I certainly do not believe that the time has yet come when we would recommend undertaking such a step. That is not to say it could not be a possibility at some future date, of course.

The automobile does represent, particularly in our urban areas, a very major source of air pollution.

Now we believe that as new emission standards take hold, and as the older cars get phased out, that there need not be in the immediate future any substantial worsening of the situation. There will come a time, as the President indicated in his February message, and as we do in our report, that despite the improvement in individual automobile emission controls, the sheer increase in automobile population will at some point probably toward 1980, overcome any possible, or could overcome any possible improvement such as I have described.

It is this reason, and to guard against this kind of eventuality, that is leading us to emphasize the development of viable alternatives. But first, we do not have the alternatives at hand as yet.

I would not believe that the pollution impact of the automobile is yet to a degree which would lead this Congress to tell the American people that you can't drive a car anymore.

Now that day may come, but I would say it is a considerable ways off yet.

And in the meantime, I think that what we should be doing is emphasizing the development of alternatives, and that is what we are doing.

Senator MUSKIE. According to the criteria on carbon monoxide emissions issued by the Department of HEW, the carbon monoxide concentrations already exceed what would be the health effects limits in every major city of the United States today, for some period of time, during the day.

Now, these emissions are bound to increase because the used car population is going to be increased by some millions of unsatisfactorily operating automobiles—before we begin to get the satisfactory substitute which you are talking about. That means the carbon monoxide levels in these cities are going to rise above the present levels.

I don't think carbon monoxide emissions are going to stabilize at present levels. I think they are going to rise above the present levels, during the years in which we are waiting for something like a clean, new car.

It seems to me that unless we impose some kind of pressure we do not now have—the evolutionary approach isn't satisfactory.

This is the question the committee is laboring with. I can't prejudge what the committee will do. I think we are all frustrated by it. But I think we are strongly drawn to the idea of national deadlines as a way of applying the pressure, leaving it, of course, to the particular regions to establish stronger standards or more restrictive ones within their own areas.

We are not talking about a national mandate to limit the movement of cars, but national standards which give regions that option.

Mr. TRAIN. Of course, I haven't seen the language which the committee may have developed. I am not even sure whether the committee has developed language along these lines.

But if I could comment very generally, not having seen any specifics, and addressing myself to this idea of deadlines, national deadlines on an across-the-board kind of way, and not speaking specifically of the automobile problem, but of a range of problems, I think that probably much could be said for that kind of an approach.

Now again, I would want to know what the details would be, before committing myself to that statement, but in principle I think there is much to be said for the use of that kind of deadline.

I think we all have to recognize that deadlines don't solve problems. There is a lot else that has to go with it. Tough standards, and tough enforcement, and funding to support those programs, training, and so forth.

But deadlines, I suppose, can help create an atmosphere of urgency, and help encourage the kind of action which leads toward solutions.

I think that would be my general reservation. I don't think that the public should be led to believe that just because we set some deadline dates, that the particular problems will go away on that date. They might or might not.

We must make some technological breakthroughs, and this takes a lot else beyond just deadlines, but in principle I am not a bit opposed to the idea. I think that there may be much to be said for it.

Senator MUSKIE. It might be useful to you to give a little bit of the argument we have with ourselves, that leads us to our present state.

First, the administration proposed national ambient air quality standards. We felt—at least I felt, and there have been several members of the committee who felt—that that would be deluding the public: to set national ambient air quality standards, without a deadline.

Without a deadline, there is nothing national about the standard.

To make a standard national, there must be a national deadline, it seems to us, because under the proposal submitted, we have national standards, but the deadlines for meeting them would have varied within various regions and various cities of the country.

I am saying this not in critical context at all. This was the way our reasoning went.

Then we began to debate with ourselves the idea of a national deadline for ambient air quality standards. This seemed to us to pose the problem that we have discussed of the automobile. We are talking about a national deadline 3 or 4 or 5 years from now: how do we on a national basis insure that at the end of that period, whichever we choose, the automobile is going to be in a position to comply? That created a problem for us.

Now we are considering a combination: National emission standards for automobiles, tied to a deadline, combined with regional ambient air quality standards, giving communities with the tougher problems the option of being tougher in dealing with them, either by requiring add-on devices, or by restricting the movement of automobiles within their own limits.

This, I think, traces the route we have taken, and brings you to the point at which we are now trying to decide what we ought to do. I would be interested in having any followup comments off the record or in any way representing your reaction to this approach.

Mr. TRAIN. Well, naturally, we would be delighted, members of the Council and our staff, to discuss these matters with the members of your subcommittee, your staff.

Senator MUSKIE. Thank you very much.

Senator BOGGS. No further questions.

Senator MUSKIE. I guess that there are no further questions that we have to ask at this point. There are many we would like to ask, and I

am sure in the course of the months and years ahead, we will have many exchanges.

Mr. TRAIN. We would be willing to come back, Mr. Chairman.

Senator MUSKIE. Thank you very much.

(Whereupon, at 12:47 p.m., the subcommittee recessed, to reconvene subject to call of the Chair.)

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